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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/066,663	02/06/2002	Seung Keun Ahn	2950-206P	4625
2292	7590	06/17/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			HUBER, PAUL W	
			ART UNIT	PAPER NUMBER
			2653	

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/066,663

Applicant(s)

AHN, SEUNG KEUN

Examiner

Paul Huber

Art Unit

2653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 1-14 is/are allowed.
6) ☒ Claim(s) 15-18 and 23-27 is/are rejected.
7) ☒ Claim(s) 19-22 and 28 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15-18 and 23-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Noxon et al. (USP-5,923,629) considered with Official Notice.

Regarding claims 15-18 & 23, Noxon et al. discloses a method of modulating a source data to be written onto a recording medium under the conditions of a given code rate of 2/3 and limited run length. The source data is modulated to a coded data based on at least one mapping table, the mapping table including a first table (fig. 2) and a second table (fig. 3) containing coded data corresponding to the source data. The first table being a 2/3 table containing 3-bit coded data for 2-bit source data, and the second table being a 4/6 table containing 6-bit coded data for 4-bit source data, wherein one of the first table and the second table is selected according to a bit sequence of the source data. See col. 3, line 63, through col. 4, line 28.

Regarding claims 24-27, Noxon et al. discloses that the "system 10 has an encoder/decoder 16" (col. 3, line 47) and throughout the disclosure refers to decoding the read data to reproduce the source data. Therefore, the invention disclosed by Noxon et al. must inherently demodulate the coded data written onto the recording medium using de-mapping tables as claimed which inversely correspond to the first table (fig. 2) and the second table (fig. 3) in order to reproduce the source data.

Noxon et al. discloses the invention as claimed, but fails to specifically teach that the recording medium is an optical recording medium. However, it is manifestly well known in the art to use optical storage to achieve high data density and Official Notice is hereby taken. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Noxon et al. to record the modulated data onto an optical recording medium as manifestly well known in the art. A practitioner in the art would have been motivated to do this for the purpose of achieving high data density.

Relative to the doctrine of Official Notice, see *In re Fox*, 176 U.S.P.Q. 340 at 341 (CCPA-1973).

Claims 1-14 are allowed.

Claims 19-22 and 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


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Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to Paul Huber at telephone number 571-272-7588.



Paul Huber
Primary Examiner
Art Unit 2653

pwh
June 10, 2005